3GPP TSG RAN WG1 Meeting #107-e R1-211xxxx

11th November – 19th November 2021

Agenda Item: 8.10

Source: Moderator (Qualcomm Incorporated)

Title: Summary of [106bis-e-R17-RRC-eIAB] Email discussion on Rel-17 RRC parameters for eIAB

Document for: Discussion and decision

This document provides a summary of the following email discussion on upper layer parameters to support eIAB physical layer operation:

[107-e-R17-RRC-eIAB] Email discussion on **Rel-17 higher layer parameters (RRC, MAC-CE, and F1AP)** for eIAB – Luca (Qualcomm)

* Email discussion to start on November 15

The starting point from the discussion is largely based on the outcome of the related discussion in RAN1#106b-e, reflected in [1], which is the starting point. Track changes was enabled to highlight the subsequent modifications. Additional input was provided in [2]. The moderator further attempted to incorporate all the latest agreements.

The plan is to continue this WI specific discussion using this format. Once agreed, RRC, MAC-CE and F1AP parameters will be extracted and provided for consolidation with other Wis in the respective discussions and corresponding LSs.

| **Param. ID** | **Sub-feature group** | **New or existing parameter** | **Parameter name in specification** | **Description** | **Value range** | **Default value** | **IAB node specific/IAB nodes common** | **Specification** | **Signaling** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P01 | Resource multiplexing | New | Rel-17 frequency-domain IAB-DU-Resource-Configuration-H/S/NA-Config (final name in specification to be determined by RAN2/3) | Indicates H/S/NA attributes per RB set, per D/U/F resource type within a slot, for multiple slots and/or over a subset of slots. | {Hard, Soft, Not Available} per RB set, per resource type in a slot [TBD relative to IAB-DU-Resource-Configuration-TDD-Config]  |  | IAB node specific |  | **F1AP** | **RAN1 #105-e**AgreementFor frequency domain multiplexing, H/S/NA configurations for an IAB-node are provided separately in addition to the Rel-16 H/S/NA**Agreement**If an IAB node is configured with a frequency-domain H/S/NA configuration down select between the following options:* Alt. 1 Either the Rel-16 H/S/NA configuration or frequency domain configuration is applied for a given resource
	+ FFS: Whether configurations are switched with per-slot, per-resource type within a slot, or per-symbol granularity
* Alt. 2 The Rel-16 H/S/NA configuration and frequency domain configuration are jointly applied

**RAN1 #106-e****Agreement**The semi-static configuration of H/S/NA resource type in frequency domain is provided per RB set, per D/U/F resource type within a slot.**RAN1#106bis-e**AgreementThe Rel-17 frequency domain H/S/NA configuration is provided across multiple slots and/or over a subset of slots only, with the same time-domain granularity and pattern duration as the Rel-16 H/S/NA configuration (i.e. gNB-DU Cell Resource Configuration (9.3.1.107 in TS 38.473 [8])).* For a given slot, different H/S/NA resource types can be configured for different RB sets
* Additional signaling details (e.g. bitmap, slot pattern, etc.) can be left up to RAN3
* FFS: The number of different frequency domain configurations at a given time
 |
| P02 | Resource multiplexing | New | RB Set Configuration | Indicates the configuration for up to M non-overlapping RB sets for a given DU cell, used for frequency domain resource allocation via [Rel-17 frequency-domain IAB-DU-Resource-Configuration-H/S/NA-Config].For a given DU cell, the RB set size, in terms of number of PRBs, is N.  | * List of values for N = {2, 4, 8, 16, 32, 64}
* [N is at least the # PRBs corresponding to the MT’s configured #PRB of an RBG]
* List of values for M = 4, 8, or 16.
 |  | IAB node specific |  | **F1AP** | **RAN1 #105-e****Agreement**The minimum resource size for configuring the frequency domain granularity is a set of N RBs:• Candidate values for N: {4, 8, 16, other values TBD}• N is at least the # PRBs that are corresponding to the MT’s # PRBs of an RBG).FFS: Scaling or configuration of N based on system BW or size of IAB-MT BWP**RAN1 #106-e****Agreement**N is a configured number of PRBs, where the CU configures N* N = {2, 4, 8, 16, 32, 64}
* FFS: Value(s) of N in case of multiple configured BWPs at the IAB-MT
* This agreement does not revert any existing RAN1 agreement

**Requires intra/inter CU coordination:** No**RAN1 #106bis-e****Agreement**A single value for the RB set size, N, is configured for a given IAB-DU cell’s Rel-17 frequency domain H/S/NA configuration.**RAN1 #107-e****Agreement**The maximum number of non-overlapping RB sets configurable per DU cell is M* where, M is to be selected from one of values from 4, 8, 16
* DU frequency configuration information should be provided to the parent node.
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| P03 | Resource multiplexing | New | Frequency Domain H/S/NA Configuration Reference SCS | Indicates reference SCS to be applied to Rel-17 IAB-DU-Resource-Configuration-H/S/NA-Config at the IAB-DU | FR1: {15kHz, 30kHz, 60kHz}FR2: {60kHz, 120kHz} |  | IAB node specific |  | **F1AP** | **RAN1 #106-e****Agreement**A Reference SCS is configured for frequency domain H/S/NA configuration.**Requires intra/inter CU coordination:** No |
| P05 | Resource multiplexing | New | Peer Parent Common Resource Configuration | Indicates the semi-static and/or cell-common higher layer configuration (e.g. SSB, CORESET 0, and RACH and configurations) from/for different parent nodes. | TBD (at least cell-common higher layer configuration (e.g. SSB, CORESET 0, and RACH and configurations) |  | IAB node specific |  | **F1AP and Xn** | **RAN1 #106-e****Agreement**For intra-donor and inter-donor DC scenarios, coordinating the semi-static and/or cell-common higher layer configuration (e.g. SSB, CORESET 0, and RACH and configurations) from/for different parent nodes. |
| P10 | Resource multiplexing | New | Rel-17 Desired Guard Symbols  | Number of symbols the IAB node would like the parent IAB node not to use at the edge (beginning or end) of a slot for the following transitions between the IAB node MT and DU per cell:* **Case#6 MT Tx and [Case #7] DU [Tx]/Rx**
* **Case#7 MT Tx (to support Case #7 at parent node) and DU Tx/Rx**
 | FFS |  | IAB node specific |  | **MAC-CE** | **RAN1 #106-e****Agreement**MAC-CE signaling of Desired/Provided Guard Symbols is enhanced (e.g. using the same Rel-16 MAC-CE design) to support indication of guard symbols additionally required for Case #6 and Case #7 timing cases.* FFS: Number of guard symbols associated with Case #6 and Case #7 timing modes
* FFS: Need for explicit indication of guard symbols switching between timing cases

**RAN1 #106bis-e****Agreement****The MAC-CE signaling of Desired/Provided Guard Symbols is enhanced to optionally indicate the number of guard symbols required for switching between at least the following cases:*** **Case#6 MT Tx and [Case #7] DU [Tx]/Rx**
* **Case#7 MT Tx (to support Case #7 at parent node) and DU Tx/Rx**
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| P11 | Resource multiplexing | New | Rel-17 Provided Guard Symbols  | Number of symbols the IAB node uses at the edge (beginning or end) of a slot for the following transitions between the IAB node MT and DU at the child node per cell:* **Case#6 MT Tx and [Case #7] DU [Tx]/Rx**
* **Case#7 MT Tx (to support Case #7 at parent node) and DU Tx/Rx**
 | FFS |  | IAB node specific |  | **MAC-CE** |
| P12 | FFS: Resource multiplexing or Interference management | New | *Child IAB-DU Restricted Beam Indication* | Signaling from an IAB-node/IAB-donor to a child node indicating beams of the child IAB-DU in the direction of which simultaneous operation is restricted.**At least SSB ID and [STC index] are used to indicate child IAB-DU’s restricted beams.****The indication can optionally comprise some combination (one or multiple) of the following IAB node’s parameters, associated with the indicated beam restriction:*** **[Multiplexing mode]**
* **[MT’s DL beam (e.g. TCI state id)] or MT’s UL beam (e.g., SRI id)**
* **[DU resource configuration (e.g. soft resources)]**
* **[Slot index]**
 | FFS |  | IAB node specific |  | **MAC-CE** | **RAN1 #106-e****Agreement**MAC-CE signaling from a parent node is supported for indication of beams of an IAB-DU in the direction of which simultaneous operation is restricted* FFS: Details of beam indication (e.g. TCI state ID, Spatial relation information ID, RS ID (including CSI-RS, SRS, SSB, etc.))
* FFS: Applicability to other beams

**Agreement****Spatial domain restrictions from a parent node or recommendations from a child node is limited to a subset of time resources in which simultaneous operation is applied.*** **FFS: Handling of frequency resources in case of FDM operation**
* **FFS: Support for implicit/explicit indication of the simultaneous operation mode**

**RAN1 #106bis-e****Agreement****RS ID, based on the IAB node’s DU configurations, is used by a parent node to indicate beams of an IAB-DU in the direction of which simultaneous operation is restricted*** **At least SSB ID and [STC index] are supported**
* **FFS: Whether restrictions are indicated to apply differently for H or S resources**
* **FFS: Informing the parent node of SRS configuration of the IAB-MT (if collocated with the IAB-DU)**

**Agreement****The restricted beam indication from the parent node to the IAB node may be indicated (or specified) to be associated with some combination (one or multiple) of the following IAB node’s parameters:*** **[Multiplexing mode]**
* **[MT’s DL beam (e.g. TCI state id)] or MT’s UL beam (e.g., SRI id)**
* **[DU resource configuration (e.g. soft resources)]**
* **[Slot index]**
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| P13 | Interference management | Existing parameter | *Intended TDD DL-UL Configuration* | Rel-16 *Intended TDD DL-UL Configuration* is extended to support IAB-specific UFD patterns. | Permutation: ENUMERATED (DFU, UFD, …) | DFU | IAB node specific |  | **F1AP and Xn** | **RAN1#105-e**AgreementRel-16 CLI coordination signalling (Intended TDD DL-UL Configuration) is extended to support IAB specific UFD patterns.FFS: Support the exchange of IAB-DU H/S/NA resource configuration information among neighbouring IAB-nodes/IAB-donors for CLI management purposes. |
| P14 | FFS: Resource multiplexing or Interference management | New | Peer DU Resource Configuration | Indicates the DU resource configuration (UL/DL/FL, H/S/NA) of the peer IAB-node or donor DU that can be used for resource coordination in case of DC, and/or for interference management | *(Rel-16) gNB-DU Cell Resource Configuration* (which includes SCS, DUF TX periodicity, DUF config, HSNA periodicity and HSNA config) *+ (Rel-17 frequency-domain) gNB-DU Cell Resource Configuration* (which includes “Rel-17 IAB-DU-Resource-Configuration-H/S/NA-Config”, “RB Set Configuration”, and “Frequency Domain H/S/NA Configuration Reference SCS”) |  | IAB node specific |  | **F1AP and Xn** | **RAN1#106-e****Agreement****For intra-donor and inter-donor DC scenarios, in addition to coordination at the donor CU(s), a parent-node can be made aware of the DU resource configuration (UL/DL/FL, H/S/NA) of the other peer parent node that connects to the same IAB-node.****RAN1#106-e****Agreement**Support the exchange of semi-static Rel-16 IAB-DU H/S/NA resource configuration information and Rel-17 frequency domain IAB-DU H/S/NA resource configuration information among neighbouring IAB-nodes/IAB-donorsAlso related to parameter “Peer Parent DU Resource Configuration” as common signaling may be desirable. |
| P15 | Timing control | New | Timing Case Indication | The parent-node indicates to an IAB-node a list of slots and their associated UL TX timing cases (i.e., one of {Case 1, Case 6, Case 7} for each slot). | {Case 1, Case 6, Case 7} per slot, for a number of slots. |  | IAB node specific |  | **MAC-CE** | **RAN1#104-e****Agreement**Switching between Case 1, Case 6, and Case 7 timing is supported.* FFS whether Case 6 and Case 7 timing shall be restricted to certain resources, e.g. excluding resources used for access or TDM backhaul
* FFS details on switching including the switching conditions
* FFS relationship between switching timing modes with the usage/indication of different resource multiplexing modes
* FFS whether Rel-16 OTA synchronization shall be enhanced to support switching timing modes

**RAN1#105-e****Agreement**An IAB-node is indicated when Case 6 timing is performed at the IAB-node.* FFS details of the indication (e.g. semi-static and/or dynamic, implicit and/or explicit, linkage to multiplexing capability, etc.).

FFS whether an IAB-node is also indicated when Case 7 timing is performed at the IAB-node.**RAN1#106-e****Agreement**An IAB-node is explicitly indicated by the parent node when Case 6 timing is performed at the IAB-node at least for specific time resources.* FFS: whether the indication should be associated with another dimensions, e.g. multiplexing cases
* FFS whether an IAB-node is explicitly indicated by the parent node when Case 7 timing is performed at the IAB-node.

**RAN1#106-e****Agreement**An IAB-node is explicitly indicated by the parent node when Case 7 timing is performed at the parent node.FFS for signalling details**RAN1#106bis-e****Agreement**An IAB-MT is provided with a Timing Case Indication via MAC-CE that explicitly indicates a list of slots and their associated UL TX timing cases (i.e., one of {Case 1, Case 6, Case 7} for each slot).  |
| P16 | Timing control | New | Case7 Timing Offset | The parent-node indicates to an IAB-node an offset to be used by the IAB-MT to set its UL TX timing based on the legacy TA loop and the indicated offset. | FFS values. The granularity is the same as the UL TA granularity. |  | IAB node specific |  | **MAC-CE** | **RAN1#106-e****Agreement**For Case 7 timing at a parent node, the IAB-MT Tx timing of the node is obtained via the legacy TA loop plus an offset from the parent node.FFS range, granularity, and signaling details of the offset.**RAN1#106bis-e****Agreement**Case 7 UL timing offset is indicated by the parent-node via MAC-CE.**Agreement**The granularity of Case 7 UL timing offset is the same as the UL TA granularity. |
| P17 | Power control | New | Desired DL TX Power Adjustment | The IAB-MT indicates to its parent-node, its desired DL TX power adjustment to assist with the parent-node’s DL TX power allocation. **The indication can optionally comprise some combination (one or multiple) of the following IAB node’s parameters, associated with the indicated beam restriction:*** Multiplexing mode
* MT’s DL beam (e.g. TCI state id)
* (MT CC, DU cell) pair
* DU resource configuration
* FFS: Slot index
* FFS: timing mode (e.g., Case-7 timing)
 | FFS |  | IAB node specific |  | **MAC-CE** | **RAN1#104-e****Agreement**Support an IAB-node indicating information to assist with the DL power control of its parent-node towards the IAB-node without mandating an expected behavior at the parent node.* Note: At least the assistance information is for supporting the simultaneous operation within the IAB-node to avoid power imbalance
* FFS: type of assistance information (e.g., desired received power, power adjustment, preferred CSI-RS resource)
* FFS: whether this information is provided to the parent-node, the CU, or both.
* FFS: applicability of the assistance information (e.g. relation to beams or multiplexing modes)

FFS: the channel carrying this assistance information**RAN1#105-e****Agreement**The information to assist DL power allocation of the parent-node is indicated by the IAB-MT to the parent node DU in terms of desired power adjustment.* FFS applicability of assistance information, e.g. per multiplexing scenario, per resource, etc.

**RAN1#106-e****Agreement**The desired DL TX power adjustment, indicated by the IAB-MT to its parent-node to assist with the parent-node’s DL TX power allocation, is provided at least for specific time resources. The desired DL TX power adjustment can further be associated with spatial configuration. (e.g., MT’s DL RX beams).* FFS: signalling details, e.g. indication via MAC-CE, PUCCH, or legacy CSI framework.

**RAN1#106bis-e****Agreement**The following alternative is selected for the association between the indicated parent-node’s DL TX power adjustment, provided by an IAB-MT to its parent-node, and IAB-node’s resources and/or configurations:* Alt 2. The desired DL TX power adjustment is indicated to be associated with some combination (one or multiple) of the following IAB-node’s configurations:
	+ Multiplexing mode
	+ MT’s DL beam (e.g. TCI state id)
	+ (MT CC, DU cell) pair
	+ DU resource configuration
	+ FFS: Slot index
	+ FFS: timing mode (e.g., Case-7 timing)

**Agreement****The desired parent-node’s DL TX power adjustment, provided by an IAB-MT to its parent-node, is indicated via MAC-CE.*** **The indication further includes the associated configurations and/or resources for which the indicated power adjustment is applicable.**
* **The indicated adjustment is in terms of a relative offset to a reference DL TX power.**
	+ FFS: the reference power (e.g., an RS such as CSI-RS, etc) for the indication of desired adjustment.
	+ FFS: the range of values for the indicated adjustment.
 |
| P18 | Power control | New | DL TX Power Adjustment | The parent-node indicates to the IAB-node an adjustment to the parent-node’s DL TX power (e.g., in response to receiving Desired DL TX Power Adjustment from the IAB-node). **The indication can optionally comprise some combination (one or multiple) of the following IAB node’s parameters, associated with the indicated beam restriction:*** **Multiplexing mode**
* **MT’s DL beam (e.g., TCI state id, RS id)**
* **(MT CC, DU cell) pair**
* **DU resource configuration**
* **FFS: DL signal/channel type**
* **FFS: slot index**
* **FFS: timing mode (e.g., Case-7 timing)**
 | FFS |  | IAB node specific |  | **MAC-CE** | **RAN1#106-e****Agreement**Support an IAB-node indicating adjustment to its DL TX power to a child node (e.g., in response to receiving the DL TX power assistance information from the child node) at least for specific time resources.The DL TX power adjustment indication can further be associated with spatial configuration. (e.g., MT’s DL RX beams).FFS: signalling details.**RAN1#106bis-e****Agreement****The DL TX power adjustment, provided by the parent-node to IAB-MT, is indicated to be associated with some combination (one or multiple) of the following IAB-node’s configurations:*** **Multiplexing mode**
* **MT’s DL beam (e.g., TCI state id, RS id)**
* **(MT CC, DU cell) pair**
* **DU resource configuration**
* **FFS: DL signal/channel type**
* **FFS: slot index**
* **FFS: timing mode (e.g., Case-7 timing)**

**Agreement****The DL TX power adjustment, provided by the parent-node to the IAB-MT, is indicated via MAC-CE.*** **The indication further includes the associated configurations and/or resources for which the indicated power adjustment is applicable.**
* **The indicated adjustment is in terms of a relative offset to a reference DL TX power.**
	+ FFS: the reference power (e.g., an RS such as CSI-RS, etc) for the indication of DL Tx power adjustment.
	+ FFS: the range of values for the indicated adjustment.

**Agreement****The indicated DL TX power adjustment is not applied to SSBs.*** **FFS: any other cell-specific/semi-static DL signal to be exempted.**
* **FFS: applicability of the indicated TX power adjustment to other RS/channel which share the same QCL Type-D assumption.**
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| P19 | Power control | New | Desired IAB-MT PSD range | The IAB-node indicates to its parent-node, its desired PSD range to help with its MT’s UL TX power control. **The indication can optionally comprise some combination (one or multiple) of the following IAB node’s parameters, associated with the indicated beam restriction:*** **Multiplexing mode,**
* **MT’s UL beam (e.g., SRI id),**
* **(MT CC, DU cell) pair,**
* **DU resource configuration**
* **FFS: slot index**
* **FFS: timing mode (e.g., Case-6 timing)**
 | FFS |  | IAB node specific |  | **MAC-CE** | **RAN1#106-e****Agreement** Support an IAB-node indicating its desired IAB-MT PSD range to help with its MT’s UL TX power control. This information is provided to the parent node.FFS: applicability of assistance information, e.g., per multiplexing scenario, per resource, etc.FFS: signaling details, including the possibility to extend PHR.**RAN1#106bis-e****Agreement****The desired IAB-MT’s UL PSD range, provided by the IAB-MT to its parent-node, is indicated to be associated with some combination (one or multiple) of the following IAB-node’s configurations:*** **Multiplexing mode,**
* **MT’s UL beam (e.g., SRI id),**
* **(MT CC, DU cell) pair,**
* **DU resource configuration**
* **FFS: slot index**
* **FFS: timing mode (e.g., Case-6 timing)**

**Agreement****The desired IAB-MT’s UL PSD range, provided by an IAB-MT to its parent-node, is indicated via a new MAC-CE.*** **The indication further includes the associated configurations for which the indicated PSD range is applicable.**
* **FFS: the range of values for the indicated PSD range and whether RAN4 input is needed.**
* **FFS: IAB-MT’s behaviour in case the configured/indicated UL TX power is outside the indicated desired PSD range and whether RAN4 input is needed.**
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| P21 | Resource multiplexing | New | *Child IAB-MT Link NA Resource Configuration* (final name in specification to be determined by RAN2/3) | IAB-donor CU indicates, to an IAB-node/donor DU, NA attribute per D/U/F resource type within a slot, for a child IAB-MT. | {NA Downlink: ENUMERATED (true, false), NA Uplink: ENUMERATED (true, false)NA Flexible: ENUMERATED (true, false)} per slot, per child IAB-MT  |  | IAB node specific |  | **F1AP** | **RAN1#106-bis-e****Agreement:** In DC scenarios, support per-child MT link-NA resource configuration.* This configuration can be made available to IAB node as well.
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| P22 | Resource multiplexing | New | *FDMrequired* (final name in specification to be determined by RAN3) | The IAB-node indicates to Donor CU whether FDM is required or not for an enhanced multiplexing operation [for a given (MT CC, DU cell) pair]. | {FDM required, FDM not required} per multiplexing mode (DU\_RX/MT\_RX, DU\_TX/MT\_TX, DU\_TX/MT\_RX, DU\_RX/MT\_TX) per IAB-MT cell and DU cell pair |  | IAB node specific |  | **F1AP** | **RAN1#107-e****Agreement:** **Support indication of whether FDM is required or not for an enhanced multiplexing operation mode to donor CU.** |
| P23 | FFS: Resource multiplexing or Interference management | New | *IAB-MT Recommended Beam Indication* | * Signaling from an IAB-node to its parent-node indicating the recommended beams of the IAB-MT for DL RX beams and/or UL TX beams.
 | FFS |  | IAB node specific |  | **MAC-CE** | **RAN1 #106-e****Agreement****Spatial domain restrictions from a parent node or recommendations from a child node is limited to a subset of time resources in which simultaneous operation is applied.*** **FFS: Handling of frequency resources in case of FDM operation**
* **FFS: Support for implicit/explicit indication of the simultaneous operation mode**

**RAN1 #106bis-e****Agreement****The recommended beam indication from the IAB-MT to the parent node are provided via MAC-CE:*** **For DL Rx beam(s): using one or more of the following:**
	+ **DL TCI state ID**
		- **FFS: UE/IAB-MT does not assume that DL Tx power adjustment (if provided) is applied to the SSB index (if supported) indicated as QCLed reference signal in DL TCI state ID.**
	+ **[RS ID]**
	+ **[R17 DL TCI, or joint DL/UL TCI ID]**
* **For UL Tx beam(s): using one or more of the following:**
	+ **[Spatial relation]**
	+ **[RS ID]**
	+ **[R17 UL TCI, or joint DL/UL TCI ID]**
	+ **[SRI]**
 |
| P24 | Resource multiplexing | New | *AvailabilityCombinationsPerCell-r17* | Indicates availability for the soft resources of the respective RB sets corresponding to a given time resource of the child IAB-DU cell. | FFS |  | IAB node specific |  | **RRC** | **RAN1 #106bis-e****Agreement**A single DCI format 2\_5 can be received indicating availability for the soft resources of the respective RB sets corresponding to a given time resource of the child IAB-DU cell.* FFS: Extension of *AvailabiltyCombination* to include multiple RB sets in a *resourceAvailabilty* indication
* FFS: Update*resourceAvailability* mapping table defined in TS38.213 so that the indication of availability can be applied over soft resources in frequency-domain for DL or UL or Flexible symbols.
* FFS: Need for extension of the maximum payload size of DCI format 2\_5 to increase the number of IAB-DU cells that can be provided with availability information for Soft resources to accommodate the maximum number of possible RB sets for a given DU cell (if defined), or other backwards compatible signaling extensions in case the principal indication capabilities of DCI format 2\_5 are increased.
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NOTE: the Parameter ID field is an arbitrary field that was added to facilitate referencing a particular row in the parameters table when commenting.

Companies are encouraged to provide feedback on the above, in the following table:

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Ericsson | In P02, the brackets on the second bullet should be removed.In P12, if the description is to be provided from a UE/MT perspective, the text “Signaling from an IAB-node/IAB-donor to a child node indicating beams of the child IAB-DU in the direction of which simultaneous operation is restricted.” should be changed to, e.g., “Reception by a IAB-node from a parent IAB-node or IAB-donor of an indicating of beams of the IAB-DU in the direction of which simultaneous operation is restricted.”In P15, the agreement**RAN1#106bis-eAgreement**An IAB-MT is provided with a Timing Case Indication via MAC-CE that explicitly indicates…is from RAN1 #107-eIn P16, the agreement**FL Proposal 1.2b:****The dynamic range of the MAC CE case #7 timing offset indication is 12 bits.**·         **FFS the numerical values of the endpoints of the range**should be included and reflected in the value range.In P17, the agreement**FL Proposal 2.9c:****The indicated desired/provided DL TX power adjustment is in terms of a relative offset to ~~the PDSCH~~ a CSI-RS TX power that is RRC configured.**should be listed and the description updated accordingly.In P18, similar comment as for P12. Furthermore, “…associated with the indicated beam restriction…” should be removed from the description.In P19, “…associated with the indicated beam restriction…” should be removed from the description. |
| Samsung | The following T\_delta update for Case #6 timing is missing which can be newly added.**Agreement**Select Alt 2 from the aforementioned RAN1#106b-e agreement without specification impact other than the following:* Alt A: the T\_delta range is updated to support Case 6 timing.

FFS: Update of one way delay estimation equation in TS38.213 subclause 14 |
| ZTE, Sanechips | **For P02,**After the discussion during R1#106bis-e, it is clear that the configuration of N would not be coupled with MT’s RBG, it is also not clear which BWP in which MT CC the so called ‘RBG’ is referenced to. So the following whole text should be removed from the value range column.* ~~[N is at least the # PRBs corresponding to the MT’s configured #PRB of an RBG]~~

For the value of M, according to the discussion in AI 8.10.1, it would be only one value for the maximum number of the RB sets, so the list of the value is not for M. so the description part and the value range column should be changed as:Description column:Indicates the configuration for X (up to M )non-overlapping RB sets for a given DU cell.......Value range column:* ~~List of values for M = 4, 8, or 16.~~
* List of values for X = 2, 3, ...., M.

----------------------------------------------------------------------------------------------According to the highlight part of the following agreement of RAN1#107-e, a new parameter such as ‘child DU frequency configuration’ should be added. And it should include:1)child DU Served Cell Information, includes *FreInfo* (e.g. ARFCN, Frequency Band), *CarrierList* (e.g. SCS, Offset to Carrier, Carrier Bandwidth) etc.2)child DU RB set configuration3)child DU Frequency Domain H/S/NA Configuration Reference SCS**Agreement**The maximum number of non-overlapping RB sets configurable per DU cell is M* where, M is to be selected from one of values from 4, 8, 16
* DU frequency configuration information should be provided to the parent node.
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|  |  |

References

[1] R1-2110701 – Summary of [106bis-e-R17-RRC-eIAB] Email discussion on Rel-17 RRC parameters for eIAB – Moderator (Qualcomm)

[2] R1-2112356 – Resource multiplexing and RRC in enhanced IAB – Ericsson